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Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                            Result
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Maximum Match 100%
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database :
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/cgnl_7/ptodata/1/iaa/6A_COMB.pep:*
/cgnl_7/ptodata/1/iaa/6B_COMB.pep:*
/cgnl_7/ptodata/1/iaa/PCTUS_COMB.pep:*
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US-08-714-402-2
US-08-716-402-10
US-08-67-941-15
US-08-867-941-15
US-08-867-941-15
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US-08-946-475-2
US-08-946-475-2
US-08-471-044-2
US-08-471-044-50
US-08-471-044-50
US-08-471-044-50
US-08-471-046A-50
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Sequence 15, Appl
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Sequence 6, Appli	Sequence 2, Appli	Sequence 6, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 9, Appli	Sequence 15, Appl	Sequence 44, Appl	Sequence 6, Appli	Sequence 4, Appli	Sequence 4, Appli	Sequence 2, Appli	Sequence 19, Appl	Sequence 2, Appli	Sequence 3, Appli	Sequence 16, Appl	Sequence 11, Appl	Sequence 16, Appl

ALIGNMENTS

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; Sequence 11, Applicati
; Patent No. 6184371
; GENERAL INFORMATION:
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                                                                                                                                                          ; TYPE: amino acid
; STRANDEDNESS: sin
; TOPOLOGY: linear
US-09-074-658-11
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                                                                                                                                                                                                                                                                                                                                                                                 STREET: 6th Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/074,658
FILING DATE: 08-MAY 1998
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Stewart, Michael I
REGISTRATION NUMBER: 24,973
BEFERENCE (DOCKET MUMBER: 24,973
BEFERENCE (DOCKET MUMBER: 24,973
                                                       Query Match

Best Local Similarity

Matches 180; Conserv
                                                                                                                                                                                                                                        TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 2439 amino acids
                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Quijun Wang
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA
NUMBER OF SEQUENCES: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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4 TREPNKLNTLNTQRVLSKNSKRETVTLVGVFLMIFALVTSMVGAKTVFGLVESSTPNAIN 63
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                                                            Conservative
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18.6%; Pro
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                                                       Score 194.5; DB 4;
Pred. No. 1.1e-06;
8; Mismatches 328;
                                                            Indels
                                                                                                Length
                                                                                                     2439
                                                            331;
                                                          Gaps
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OF MORAXELLA

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US-08-867-941-11
Sequence 11, Application US/08867941
Patent No. 5977337
GENERAL INFORMATION:
                                                                                                                                                                                                                                     740 GISLGIW 746
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                                                                                                                                                                                         VLPLSVW 938
                                                                                                                                                                                                                                                                                   QLQYDKGDGINDTAEKAGAVFGAVKDKMSKSITKTQTPSVHTMTTHRLNLAIKAALFGVA
                                                                                                                                                                                                                                                                                                                                                                                                                          SQTVKTDKTNLEFKDGKATINLKHGESLTLQGLPEGYSYLVKETDSEGYKVKVNSQEVA- 696
                                                                                                                                                                                                                                                                                                                                                                                GFTAKADVPNYREEVG----NNQGG------GFLYNIKDIDVKGQFFGTNGEELAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EKGYREKGQAIEYSG-----LTETQLRAATQLAIYYFT-----DSAELDKDKLKDYHGF 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --AGKFLSNDNASYVVFGGKRDKTDKPVATKTVYFSAGFE--KPSTSFVDNETIGRIINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FQARVFSSND-----IGERIELSDGTYTLTELNSPAGYSIAEPITFKVEAGKVYTIIDG
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TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
FENGTH: 898 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 171;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 03-JUN-1997
CLASSIFICATION: 435
CTARSCHEY/AGENT INFORMATION:
NAME: Stewart, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (416) 595-1155
TELEPHONE: (416) 595-1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wang, Quijun
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: LACTOFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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  443
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                                                                                                                                                                                       344 SLTGKLSYYDNPNQQTAQGKYIKSQFDTTKKVNETDVYQIDAKINGNRFVGTAKSLVNEN 403
                                                                                                                                                                                                                                   220 -MRQALKQLIDPNLATKMPKQVPDDF-----QLSIFESEDK--GDKYNKGYQNLLSGG
                                                                                                                                                                                                                                                                                                                                                                                                                               148 GDELNQK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         y Match 4.5%; Score 178; DB 2; J
Local Similarity 18.6%; Pred. No. 4.9e-06;
hes 171; Conservative 118; Mismatches 305;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64 PDSSSE--YRWYG--YESYVRGHP--------YYKQFRVAHDLRVNL 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79
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                                                                                            TETAPFIKELFSKKANPNNP--NPN---
--AGKFLSNDNASYVVFGGKRDKTDKPVATKTVYFSAGFE--KPSTSFVDNETIGRIINS 498
                             FQARVFSSND-----IGERIELSDGTYTLTELNSPAGYSIAEPITFKVEAGKVYTIIDG
                                                                                                                                                                                                                                                                                                                                                                              GSSLTQKNADTPNDKDRIPKPMPILFYHG--ENASSQLPSAGKFNYTGNWLYLSDVKKRP 292
                                                                                                                                        L-----VPTKPPTPGDPPMPPNQPQTTSVLIRKYAIGDYSKLLEGATLQLTGDNVNS
                                                                                                                                                                                                                                                                                   ALSASDDRVGVYLNASGKSN------EGDVVSAAHIYLNGFQYKHTPATYQVDFDTN 343
                                                                                                                                                                                                                                                                                                                                  AIRVTQEAVWYYSDNAPISNPDESFKRESESNLVSTSQLSL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ERHR-FDPKKLNTIKVYGYGNLTTPSKNNTYINHQQADNKKNNKPVDPYENIRFGYLELQ 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EGSRSYQVYCFNLKKAFPLGSDSSVKK--WYKKHDGISTKFEDYAMSP------RIT 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PDYSNDLVQQWQGKLYVGIDAHRPDGIGTGKNLRQPITANDIKPLYFNKFPALSDLHLDS 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTDPNGDNNQLTQ-----AQKTAAAAGFFVM------GKIRDTSPKN-D 115
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SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version
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                                                                                            -SDTLEGGFYGESGDEL --
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Length 898;

Indels 324;

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RESULT

APPLICANT:

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RESULT 3
US-09-074-658-70
; Sequence 70, Application US/09074658
; Patent No. 6184371
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                                                 TELEFAX: (416) 595-1163 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                             NAME: Stewart, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-795
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                         APPLICATION NUMBER: US/0
FILING DATE: 08-MAY-1998
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Stewart, Michael I
                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Quijun Wang
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: LACTOFERRIN
NUMBER OF SEQUENCES: 78
              SEQUENCE CHARACTERISTICS:
LENGTH: 905 amino acid
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ZIP: M5G 1R7
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h Floor, 330 University Avenue
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                                                                                                                                                                                                                                                                  Version
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; STRANDEDNESS: single; TOPOLOGY: linear US-09-074-658-70
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          488
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84 YYKQFRVAHDLRVNLEGSRSYQVYCFNLKKA-----FPLGSDSSVKK-----WYKKHDGI 133
                                                                                              TDSEGYKVKVNSQEVA 696
                                                                                                                                                                          KDFHFEIELKNNKQELLSQTVKTDKTNLEFKDGKATINLKHGESLTLQGLPEGYSYLVKE
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                                                                                                                                      GDIVFDI - - KNGKIDGTGFTAKADVPNYREEVG - -
                                                                                                                                                                                                                  GKVYHAGN----IRPEFENKYLPINEPTHEKTFALDGKNKAKFDVNFDTNSLTGKLNDER
                                                                                                                                                                                                                                                    GTQWHPEDLVDIIRMEDKKEVIPV---THNLTL-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STK--FEDYA-----MSPRIT-----GDELNQKLRAVMYNG-----HPQNANGIMEGL 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YFDKFPKISDL--HLENSE----HVFDAKKANNIKIYGYGALSSPAKNPTYMNYQQEQNI 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative 102; Mismatches 264; Indels 266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.5%; Score 176; DB 4; 20.6%; Pred. No. 7.2e-06;
                                                            877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----GEVKYTHIAGROLFKYTVKPRDTDPDTFLK----
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US-09-074-658-15

Sequence 15, Application US/09074658 Patent No. 6184371 GENERAL IMFORMATION:

APPLICANT: APPLICANT:

Run-Pan

cosmore, D

Sheena M

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/074,658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6th Floor, 330 University Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Quijun Wang
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA
NUMBER OF SEQUENCES: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
TELEPHONE: (416) 595-1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 2432 amino acids
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ATTORNEY/AGENT INFORMATION:
NAME: Stewart, Michael I
                                                                                             481 KPSTSFYDNETIGGIIDRKGLNNHINEDEIIPSDDSYYGYTWGKPEKQFTKKVSSSTQVV 540
                                                                                                                                                                                                                                                                                                                                                                                         329
541 PAYFGQHDKFYF----NGNYYDLSASRVDKLAPADAVKANQSIKEKYPNATLNKDNQVTA 596
                                             407 ----NYAKFYYAKNKNGSSQVVYCFNADLKSPPDSEDGGKTMTPDFTTGEV-----
                                                                                                                                          358 EPITFKVEAGKVYTIIDGKQIENP-NKEIVEPYSVEAY-----NDFEEFSVLTTQ-- 406
                                                                                                                                                                                          428 DTLEGGFYGESGDEL----AGKFLSNDNASYVVFGGKRDKTTKPVATKTVYFS-AGFE--
                                                                                                                                                                                                                                         305 KLLEGATLQLTGDNVNSFQARVFSSNDI------GERIELSDGTYTLTELNSPAGYSIA 357
                                                                                                                                                                                                                                                                                         380 VYQIDAKINGNRFVGTAKSLVNEKTQTAPFIKELFSKKANPNNPNPN----
                                                                                                                                                                                                                                                                                                                                         262 -YQ-----NLLSG---GLVPTKPPTPG-----DPPMPPNQPQTTSVLIRKYAIGDYS 304
                                                                                                                                                                                                                                                                                                                                                                                                                       224 LKQLIDPNLATKMPKQVPDDF-----QLSIFESEDKGDKYNKG---------------------------------261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      278 YTGNWLYLSDVKKRPALSASDERVGVYLNASGKAN------EGDVVSAAHIYLNGFQ 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220 VDPYENIRFGYLELQGSSLTQKNADNQNEQDRIPKPMPILFYHG--ENASSQLPSAGKFN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 MSP-----RITGDELNQK------LRAVMYNGHPQNANGIMEGLEPLN 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161 YFNKFPALSDLHLDSERHR-FDPQKINTIKVYGYGNLTTPSNNNTHINHQQADNKKNNKP 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84 YYKQFRVAHDLRVNLEGSRSYQVYCFNLKKAFPLG--SDSSVKKWYKKHDGISTKFEDYA 141
|: :| | | : | | : | : | : | : |
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STRANDEDNESS: sir
TOPOLOGY: linear
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CITY: Toronto
STATE: Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: Can
ZIP: M5G 1R7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                      YKH-----TPATYQVDFDTNSLTGKLSYYDNPNQ--QNNKGEYLKSQFDTTKKVNETD 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ontario
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1998
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	REFERENCE/DOCKET NUMBER: 012889-006	٠.	
	BER: 39,300	٠. ٠	
	Y/AGENT INFORMATION		
	FILING DATE: 22-OCT-1990	•••	
	APPLICATION NUME		
	DRION ADDITONTON DATA:		
	LICATION NUMBER: WO	٠.	
	A:	.	
	: 21-AUG-1992	•	
	APPLICATION DATA:		
	CLASSIFICATION:	٠.	
	ING DATE: 22-MAY-1995	•••	
	CATION NUMBER: US	٠. ٠	
	T.O. ACTRICH AT.		
	SYSTEM: PC-DOS/MS-DOS	٠.	
	IBM PC compatible	٠.	
	TYPE: Floppy dis	•• •	
	COMPUTER READABLE FORM:		
	COUNTRY: United States	٠.	
		٠.	
	lexandria		
	ADDRESSEE: BUINS, DURING, SWECKEL & MACHIES STREET: P.O. Box 1404		
	PONDENCE ADDRESS:	٠.	
	UMBER OF SEQUENCES:	٠.	
,	OF INVENTION: ITS PREPARATION	٠. ٠	
C)	TITLE OF INVENTION: A COLLAGEN BINDING PROTEIN AS WELL AS		
	: SIGNAS, Chr	٠.	
	: PATTI, Jose	٠.	
	: LINDBERG,		
	APPLICANT: HOOK, Magnus		
	LICANT: GUSS,		
	Ä	•••	
	Sequence 2, Application US/U844/U31A Patent No. 5851794		
	031A-2	RES US	
	914 RINLAIKAALFGVAVLPLSVW 934	Db	
	728 KINGYLALIVIAGISLGIW 746	Qy	
SVHTMTTH 91	854 KGQFFGTNGEELAGQLHHDKGDGINDTAEKAGAVFGAVKDKMSKSITKTQTPSVHTMTTH	Db	
7		Qy	
GFLYNIKDIDV 853)ÎKNGKIDGTGFTAKADVPNYREEVGNNQGG	Db.	
YLVKETDS 683	624 HFEIELKNNKQELLSQTVKTDKTNLEFKDGKATINLKHGESLTLQGLPEGYSY	Qy	
KLNDERGDI 809	754 YHAGNIRPEFENKYLPINEPTHEKTFALDGKNKAKFEVDFNTNSLTGKL	Db	
62	WHPEDLVDIIRMEDKKEVIPVTHNLTLRKTVTG	Qy	
	,IASDDSQDDDADGDDDSDDL	Дb	
IPNNNKYQSLIGTQ 581 ;	522 AELDKDKLKDYHGFGDMNDSTLAVAKILVEYAQDSNPPQLTDLDFFIPNNNKY	Qy	
PEDDDDDL 704	657 TYNGLWAGYLTQKKDKGYSDNAETIKEKGHPGYLLTENFTP	Дb	
U	486 IEKGYREKGQAIEYSGLTETQLRAATQLAIYYFT-	Qy	
9	59/ IVLQEAKUNKPYTAIKAKSIQHISEGETHINDANQIFIKSIEVQOGKGDISII	DB DB	
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 836-20 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 1183 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 1183 amino aci
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386
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                                                                                                                                                                                                                                                                                                                                                                                                   613
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          499 YLVKEVNAQGEDTTPEGYTKKENGLVVTNTEKPIETTSISGEKVWDDKDNQDGKRPEK--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        452 YFKLYKQDDNQNTTPVDKAEIKKLEDGTTKVTWSNL-----PENDKNGKAIK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              294 LIRKYAIGDYS------KLLEGATLQLTGDNVNSFQARVFSSND-IGERIELSDGT 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64 PDSSSEYRWY----GYESYVRGHPYYK-----QFRVAHDLRVNLEGSRSY----QVYCF 109
TKVKGYTTHVDNNDMGNLIVTNKYTPETTSISGEKVWDDKDNQDGKRPEKVSVNLLANG
                                                                                                                                                           LPKYDEGKKI-----EYTVT---EDHVKDYTTDINGTTITNKYTPGETSATVTKNW
                                                                                                                                                                                                                                                                             HGFGDMNDSTLAVAKILVEYAQDSNPPQLTDLDFFIPNNNKYQSL---IGTQWHPEDLVD
                                                                                                                   -DKTNLE-----FKDGKAT----INLKHGESLTLQGLPE----GYSYLVKE- 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VEPYSVEAYNDFEEFSVLTTQNYAKFYY-----AKNKNGSSQVVYCFNADLKSPPDSEDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYTFDKDKEYPFTMKDTDNQGYFTTIENAKAIEKTKDVSAQKVWEGTQKVKP-----TI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QAWYQEHGKEEVNGK--SENHTVHNINANAGIEGTVKGELKVLKQDKDTK-----A
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                                     TDSEGYKVKVNSQEVANATVSK-----TGITSDETLAFENNKEPVVPTGVDQKI--NG
                                                                            DDNNNQDGKRPTEIKVELYQDGKATGKTAILNESNNWTHTWTGLDEKAKGQQVKYTVEEL
                                                                                                                                                                                                IIRMEDKKEVIPVTHNLTLRKTVTGLAGDRTKDFHFEIE-----LKNNKQELLSQTVKT- 643
                                                                                                                                                                                                                                     ----DKDN------QDGKRPEKVSVN-LLADGEKVKTLDVTSETNWKYE-FKD
                                                                                                                                                                                                                                                                                                                    TWTGLDEKAKGQQVKYTVEELTKVKGYTTHVDNNDMGNLIVTNKYTPETTSISGEKVWD-
                                                                                                                                                                                                                                                                                                                                                         -----GYREKGQAIEYSGLTETQLRAATQ------LAIYYFTDSAELDKDKLKDY
                                                                                                                                                                                                                                                                                                                                                                                                 GTTTTNKYTPGETSATVTKNWDDNNNQDGKRPTEIKVELYQDGKATGKTAILNESNNWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---VSVNLLANGEKVKTLDVTSETNWKYEFKDLPKYDEG-KKIEYTVTEDHVKDYTTDIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YTLTELN-----SPAGYSIAE------PI-TFKVEAGKYYTIIDGKQIENPNKEI 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----DKGDKY-----NKGYQNLLSGGL------VPTKPPTPGDPPMPPNQPQTTSV 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIAN--VKFKLSKKDGSVVKDNQ-----KEIEIITDANGIANIKALPSGDYILKEIEAPR
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US-08-714-402-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.7%; Score 145; DB 2; Best Local Similarity 19.8%; Pred. No. 0.0035; Matches 190; Conservative 121; Mismatches 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1112 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/714,402
FILING DATE: 16-SEP-1996
FILING DATE: 16-SEP-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
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ATTORNEY/AGENT INFORMATION:
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: ROCHA, APPLICANT: FISCHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                               263 -QNLLS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           218 -ISQDIPKIIYDSANSPLAIGKYHAENHQLIYTFTDYIAGLDKVQLSAELSLFLENKEVL 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167 TEVSSGAADFYRNHAAYFKMSFELKQKDKSETINPGDTFVLQLDRRLNPKG------ 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        112 KTSRTWTVTVYENGYTKLVENPYNGEIISKAGSKDV----SSSLQLENPKMSVVSKYGK 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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CITY: Alexandria
STATE: Virginia
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                                                                                                                                                                                                                                                                                                                                                                           AVWYYSDNAPISN-PDESFK-----RESESNLVSTSQLSLMRQALKQLIDPNLATKMP 237
                                                                                                                            SSYGVDVTKLTLRTDITAGLGNGFQMTKRQRIDFGNNIQNKAFIIKVTGKTDQSGKPLVV 454
                                                                                                                                                                                                                                                                                          FVWYVYVNPNRTNIPYATMNLWGFGRARSNTSDLENDANTSSAELGEIQVYEVPEGEKLP
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FISCHETTI, Vincent A.

VENTION: FIBRONECTIN AND FIBRINGEN BINDING

VENTION: FIBRONECTIN BINDING

VENTION: FIBRO
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                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,
                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                  PRIOR APPLICATION DATA:
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                                FILING DATE: 2: CLASSIFICATION:
APPLICATION NUMBER:
                                                                   APPLICATION NUMBER:
                                                                                                     SOFTWARE:
                                                                                                                  OPERATING SYSTEM: MS-DOS Version
                                                                                                                                    COMPUTER: Hewlett-Packard Vectra
                                                                                                                                                                                               ZIP: 63043
                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                CITY: St.
                                                                                                                                                                                                                                                              STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KI 729
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGYS----
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                                                                                                                                                                                                                              Missouri
                                                                                                                                                                                                                                                             929 Fee Fee Road,
                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                              Wise, Kim 5.
McIntosh, Mark A.
                                                                                                     WordPerfect 5.1
                                                                                                                                                                                                                                                Louis
                                                                                                                                                                                                                                                                                   Grace J.
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                                                                                                                                                                                                                                                                                                                                                  DNA Sequences Coding for Mycoplasma Hyopneumoniae Surface Antigens, Corresponding Proteins and Use in
                                                                                                                                                                                                                                                                                                                                     Vaccines
                                                                 US/08/703,947
08/373,957
                                                                                                                                                                                                                                                                                   Fishel
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                                                                                                                                                                                                                                                                Suite 100
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; PUBLICATION DATE: RELEVANT RESIDUES IN US-08-703-947-2
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SEQUENCE CHARACTERISTICS:
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DESCRIPTION:
DESCRIPTION:
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                                                                                                                                                                                                                                                                                        PUBLICATION INFORMATION:
AUTHORS: Mary F. Kim,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (314) 878-0440
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ORIGINAL SOURCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
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STRAIN: J
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                                                                                                                                                                                                   hyopneumoniae p65 Surface Lipoprotein Expressed in Escherichia coli from a Cloned
                                                                                                                                                                                                                                        Identification and Mapping of an Immunogenic Region of Mycoplasma
                                                                                                                2637-2643
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                                                                                                                                                                                                                                                                                            Mary F. Kim, Manijeh B. Heidari,
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                                                                                                                                                                    Infection
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627 residues of the P65 lipoprotein, deriv
from the nucleic acid sequence
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                         SEQ
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                                                                                                                                                                                                                                                                                                                               lipid modification process
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and Kim S. Wise
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US-08-480-604A-10; Sequence 10, Application US/08480604A; Patent No. 5736139
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Best Local Similarity
Matches 163; Conserv
                                                                                                                    GENERAL INFORMATION:
                                                   APPLICANT: KINK, JOHN A.
APPLICANT: THALLEY, BRUG
APPLICANT: PADHYE, NISHJ
   APPLICANT: FIRCA, APPLICANT: STAFFORITIFIE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             517
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                                   THALLEY, BRUCE S.
PADHYE, NISHA V.
FIRCA, JOSEPH R.
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 STAFFORD, DOUGLAS C.
VENTION: VACCINE AND ANTITOXIN FOR TREATMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----DLSVFAKSNKEFLEK-LNENKQTSEFIAQKST-------
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; MOLECULE TYPE:
US-08-480-604A-10
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Best Local Similarity
Matches 154; Conserv
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                                                                                                                                                                                                                                                                    1633
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LENGTH: 2366 amino aci
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
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PRIOR APPLICATION NUMBER: US 08/329,154
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NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
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STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                     83 PYYKQFRVAH--------DLRVNLEGSRSYQVYCFNLKKAFPLGSDSSVKKWY 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 01
FTLING DATE: 14-APR-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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ZIP: 94104
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PNQPQTTSVLIRKYAIGDYSKLLEGATLQLTGDNVNSFQARVFSSNDIGERIELSDGTYT 344
                                                                          VPDDFQLSIFESEDKGD-----
                                                                                                                IRYVW-----SNDGNDF-----ILMSTSEENKVSQVKIRFVNVFKDKTLANKLS--
                                                                                                                                                                                                                                                                  PYFIKFNTLETNYTLYVGNRQNMIVEPNYDLDDSGDISSTVINFSQKYLYGIDSCVNK--
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220 MONTGOMERY STREET, SUITE
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                                       -FNFSDKQDVPVSEIILSFTPSY---YEDGLIGYDLGLV---
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31-OCT-1989
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DB 1; Length 2366;

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WESULT 9
US-08-405-496A-10
Sequence 10, Application US/08405496A
Patent No. 5919665
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                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-0CT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
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                   PRIOR APPLICATION DATA:
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STREET: 220 MONTGOMERY STREET,
CITY: SAN FRANCISCO
                                                                                                                                              CLASSIFICATION:
                                                                                                                                                              APPLICATION NUMBER: US/01 FILING DATE: 16-MAR-1995
                                                                                                                                                                                                                                                                                                                COUNTRY: UZIP: 94104
APPLICATION
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NUMBER:
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US 07/985,321
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Best Local Similarity
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TELEFAX: (415) 397-83:
INFORMATION FOR SEQ ID NO:
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LENGTH: 2366 amino acids
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                                            2201
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                                                                                                                                                                                                                          2081
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NPNKETVEP---YSVEAYNDFEEFSVLTTQNYAKFYYA-----KNKNGSSQVVYCFNA 429
                                              FGETYTIETGW----IYDMENESDKYYFNPET----KKACKGINLIDDIKYYFDEKGIM
                                                                                                                                    VQNIDDNYFYIDDNGIVQIGVFDTSDGYKYFAPANTVNDNIYGQAVEYSGLVRVGEDVYY 2200
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                                                                                      ---IGTQWHPEDLVDIIRMEDKKEVIPVTHNLTLRKTVTGLAGDRTKDFHFE-----
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                                                                                                                                                                              -----YAQDSNPPQLTDLD-----FFIPNNN------KYQSL-----
· IELKNNKQELLSQTVKTDKTNLEFKDGKATINLK - - - HGESLTLQ - - - - - GLPEGYS
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                                                                                                                                                                                                                                                                    ----LDKDKLKDYHGFGDMN------DSTLAVAKILVE----
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                                                                                                                                                                                                                                                                                                              -FAHHNEDL----GNEEGEEISYSGILNFNNK-----IYYFDDSFTAVVGWK 2080
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPHD-01308
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Best Local Similarity 19.7:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, 'CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/867,941
FILING DATE: 03-JUN-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 894 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Stewart, Michael I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA NUMBER OF SEQUENCES: 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2252 RTGLISFENNNYYF-----NENGEMQFGYINIEDKMFYFGEDGVMQIGVFNTPDGFK 2303
                                                                                                                                                                                                                       142
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 262
                                      329
                                                                                                                                                                                                                                                          161
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ZIP: M5G 1R7
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                                    YKH-----TPATYQVDFDTNSLTGKLSYYDNPNQ--QNNKGEYLKSQFDTTKKVNETD 379
                                                                                                                                                                                                                    MSP-----RITGDELNQK------LRAVMYNGHPQNANGIMEGLEPLN 178
                                                                                                                                                                                                                                                      YFNKFPALSDLHLDSERHR-FDPQKINTIKVYGYGNLTTPSNNNTHINHQQADNKKNNKP 219
                                                                                                                                                                                                                                                                                          YYKQFRVAHDLRVNLEGSRSYQVYCFNLKKAFPLG--SDSSVKKWYKKHDGISTKFEDYA 141
 -- YQ--
                                                                      LKQLIDPNLATKMPKQVPDDF-----QLSIFESEDKGDKYNKG------
                                                                                                         YTGNWLYLSDVKKRPALSASDERVGVYLNASGKAN-----EGDVVSAAHIYLNGFQ 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
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Yang, Yan-Ping
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---NLLSG----GLVPTKPPTPG-----DPPMPPNQPQTTSVLIRKYAIGDYS 304
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                                                                                                                                             ----AIRVTQEAVWYYSDNAPISNPDESFKRESESNLVSTSQLSLMRQA 223
                                                                                                                                                                                                                                                                                                                             3.5%; Score 138; DB 2; Length 894;
19.7%; Pred. No. 0.0093;
ative 91; Mismatches 283; Indels 2
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                                                                                                                                                                                                                                                                                                                               Indels 278;
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US-08-790-912-4
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                                                                                                      Sequence 4, Application US/08790912 Patent No. 5976542
                                                                                    GENERAL INFORMATION:
TITLE OF INVENTION:
                                      APPLICANT: Weiser, Jeffrey N. APPLICANT: Plaut, Andrew G.
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                                                                                                                                                                                                                                                                                684 EGYKVKVNSQEVA-----NATVSKTG 704
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                                                                                                                                                                                                                                                                                                                         VFDI -- KNGKIDGTGFTAKADVPNYREEVG ---- NNQGG----
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COMPOSITIONS AND METHODS FOR TREATMENT OF STREPTOCOCCUS PNEUMONIAE INFECTION
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                       FILING DATE: 23-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Leary, Kathryn
                                                                                                   CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/026,939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                   APPLICATION NUMBER: US/08/790,912 FILING DATE: 29-JAN-1997
                 NAME: Leary, Kathryn REGISTRATION NUMBER: 36,317
                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                             STATE:
                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Philadelphia
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REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                             Pennsylvania
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                                                                                                                                                                                                                                                                                                                                                            USA
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RESULT 12
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                                                                              1158 AKTKENLANTLEKLLSADAVIASENQTINGYV 1189
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LENGTH: 1861 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (215) 567-2020
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                                                                                                                       714 ENNKEPVVPT---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VRGHPYYKQFRVAHDLRVNLEGSRSYQVYCFNLKK-AFPLGSDSSVKKWYKKHDGISTKF 137
                                                                                                                                                                                                                                                                                                                                                                                                      SLEERGTILDVSQIASKKSEINSLSAPKVETLLTSTNKESDFSKVKDY----
                                                                                                                                                                                                                                                                                                                                                                                                                                           GYREKGQAIEYSGL----TETQLRAATQLAIYYFTDSAELDKDKLKDYHGFGDMNDSTLA 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADLKSPPDSEDGGKTMTPDFTTGEVKYTHIAGRDLFKYTVKPRDTDPDTFLKHIKKVIEK 488
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                                                                                                                                                          -----GLIYTPNQFLQNHSSIVNEVLPDLKAVDYQSEAIRNTLGISSGVSLTELYLEEQF 1157
                                                                                                                                                                                                  INLKHGESLTLQGLPEGYSYLVKETDSEGYKVKVNSQEVANATVSKTGITSDETL---AF
                                                                                                                                                                                                                                                                                EVIPVTHNLTLRKTVTGLAGDRTKDFHFEIELKNNKQELLSQTVKTDKTNL-EFKDGKAT 656
                                                                                                                                                                                                                                                                                                                     -----QASRALAYKNIEKLLPFYNKATIVKYGNLVKEDSTLYEKEILSAVMMKD--
                                                                                                                                                                                                                                                                                                                                                           VAKILVEYAQDSNPPQLTDLDFFIPNNN-----KYQSLI--GTQWHPEDLVDIIRMEDKK 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LHNVLSDINVMNGN-----AISGYHYRGMRITDSYS-----NKDNR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NADSTNQTVGGLAGLVEKDALISNSYAEGNINNVKRFGSVAGVAGYLWDRDSSEERHAGR 906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----VYKVTLEKDEV------VTKE
                                                                                                                                                                                                                                           ---NEVITDIASHKEAANKLLIHYKDHSSEKLDLTYQSDFSKLAEYRVGDT-
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18.0%; Pred. No. 0.064;
                                                                                                                   ----GVDQKINGYL 733
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels 258;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: FP-59941/RFT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT_CUS95/10661A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS LENGTH: 1394 amino ac
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PRIOR APPLICATION UDATA:
APPLICATION UDATA:
FILING DATE: 25-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Washington University, et al.
TITLE OF INVENTION: Haemophilus Adherence and Penetration Protein
NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: 1: MOLECULE TYPE:
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NAME: Trecartin, Richard
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295 SLYTRAGNGVYTISGNDNGQG-SITQKSGIPSEIKITLANMSLPLKEKDKVHNPRYDGPN 353
                                                                                                                                                                                                                                                       145 RLHKFVTEAAPIDMTSNMNGSTYSD
                                                                                                                                                                                                                                                                                                                                                                                148 GDELNQKLRAVMYNGHPQNANGIMEGLEPLNAIRVTQEAVW---YYSDNA-----PISNP 199
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CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                          90 ----NOYIVSVAHNVGYTDVDFGAEGNNP-DQHRFTYKIVKRNNYKKDNLHPYEDDYHNP
                                                                                                                                                                                                                                                                                                                                                                                                                              49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91 --AHDLRV-NLEGSRSYQVYCFNLKKAFPLGSDSSVKKWYKKHDGISTKFEDYAMSPRIT 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48 KTVF------GLVESSTPNAINPDSSSEYRWYGYESYVRGHPYYKQFRV-----
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                                       ---IELSDGTYTLTELNSPAGYSIAE----PITFKVEAGKVYTIIDGK-QIENPNKEIVE
                                                                                 PIAGSKGDSGSPMFIYDAEKQKWLINGILREGNPFEGKENGFQLVRKSYFDEIFERDLHT 294
                                                                                                                                                                    DKGDQVAGAYHYLTAGNTHNQRGAGNG------YSYLGGDVRKAGEYGPL
                                                                                                                                                                                                           DKGDKYNKGYQNLLSGGLVPTKPPTPGDPPMPPNQPQTTSVLIRKYAIGDYSKLLEGATL
                                                                                                                                                                                                                                                                                               -----DESFKRESESNLVSTSQLSLMRQALKQLIDPNLATKMPKQVPDDFQLSIFES-E
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                                                                                                                          ----NVNSFQ-ARVFSSNDIGER----
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US-08-946-475-2
; Sequence 2, Application US/08946475
; Patent No. 6013505
; Patent No. 1013505
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                 INFORMATION FOR SEQ ID NO:
                                                                                                                                        APPLICATION NUMBER: 60/027,973
FILING DATE: 08-OCT-1996
ATTORNEY/AGENT INFORMATION:
NAME: Glmmi, Edward R
REGISTRATION NUMBER: 38,891
                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast-SEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Palmer, Lesile
TITLE OF INVENTION: TOPOISOMERASE
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gwynn, Michael
APPLICANT: Kallender, Howard
APPLICANT: Palmer, Leslie
SEQUENCE CHARACTERISTICS:
                                                                              REGISTRATION NUMBER: 38,891
REFERENCE/DOCKET NUMBER: P50560
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540 DSTLAVAKILVEYAQDSNPPQLTDLDFFIPNNNKYQSLIGTQWHPEDLV-----DIIRME 594
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               398
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 PYSVEAYNDFEEFSVLTTQNYAKFYYAKNKNGSSQVVYCFNADLKSPPDS--EDGGKTMT
                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/946,475 FILING DATE: 08-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 709 Swedeland CITY: King of Prussia
                                                           TELEFAX:
                                                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: SmithKline Beecham Corporation STREET: 709 Swedeland Road
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-946-475-2
US-08-946-475-9
Sequence 9, Application US/08946475
Patent No. 6013505
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Best Local Similarity
Matches 133; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           451
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                       576 -GEDCEVCGSP 585
                                                                                                                                                         661 HGESLTLQGLP 671
                                                                                                                                                                                                                                                                                                                                                                             511 TQLAIYYFT-DSAELDKD-----KLKDYHGFGDMNDSTLAVAKILVEYAQ--DSNPPQLTD 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             353 MRTPDDMKSF--LTKDQYRLYKLIWERFVASQMA------PAILD---TVSLDITQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253 ANPFTTS------TLQQEAARKLNFKARKTMMVAQQLYEGIDLKKQGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       286 NQPQTTSVLIRKYAIGDYSKLLEGATLQLTGDNVNSFQAR--VFSSNDIGERIEL-SDGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170 IMEGLEPLNAIRVTQEAVWYYS------DNAPISNP-----DESFK--RESESNLV 212
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                                                                                                                                                                                                                                                                             ARLVKTLEELKIGRPSTYAPTIDTIQKRNYVKLESKRFVPTELGEIVHEQVKEYFPEIID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IGLITYMRTDSTRISDTAKAEAKQYITDKY--GESYTSKRKASGKQGDQDAHEAIRPSST
                                                                                                                                                                                                   VEFTVNMETLLDKIAEGDITWRKVIDGFFSSFKQDV--ERAEEEMEKIEIKDEPA----
                                                                                                                                                                                                                                       VTHNLTLRKTVTGLA-GDRTKDFHFEIELKNNKQELLSQTVKTDKTNLEFKDGKATINLK 660
                                                                                                                                                                                                                                                                                                                                                       --MTLYVETKDDSDSEKENKLPKLEQ----GD----KVTATQIEPAQHYTQPPPRYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                     GDIK----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WTIEGEFRYKKSKFNAKFLHYKNKPFKLKTKKDVEKITAALDGDQFEITNVTKKEKTRNP
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                                                                                                                                                                                                                                                                                                         3.2%; Score 125.5; DB 3;
19.8%; Pred. No. 0.066;
7ative 89; Mismatches 228;
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GENERAL INFORMATION:
APPLICANT: Gwynn, Michael
APPLICANT: Kallender, Howard
APPLICANT: Palmer, Leslie
TITLE OF INVENTION: TOPOISOMERASE
NUMBER OF SEQUENCES: 13

CORRESPONDENCE

ADDRESS

SmithKline Beecham Corporation

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-946-475-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 133; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: P5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/946,475
FILING DATE: 08-OCT-1997
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LENGTH: 711 amino acid
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MEDIUM TYPE: Diskette
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451 GEVKYTHIAGRDLFKYTVKPRDTDPDTFLKHIKKVIEKGYREKGQAIEYSGLTETQLRAA
                                                                                                               373
                                                                                                                                             391 VEAYNDFEEFSVLTTQNYAKFYYAKNKNGSSQVVYCFNADLKSPPDSEDGGKTMTPDFTT 450
                                                                                                                                                                             315 IGLITYMRTDSTRISDTAKAEAKQYITDKY--GESYTSKRKASGKQGDQDAHEAIRPSST
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                                                                                                                                                                                                                                                                      286 NQPQTTSVLIRKYAIGDYSKLLEGATLQLTGDNVNSFQAR--VFSSNDIGERIEL-SDGT
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                                                                                                                                                                                                                                                                                                                                       245
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Gimmi, Edward R
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 610-270-5090
                                                                                                               MRTPDDMKSF--LTKDQYRLYKLIWERFVASQMA---
                                                                                                                                                                                                          YTL----IDGKQIENPNKEIVEPYS-
                                                                                                                                                                                                                                                                                                                                       QLSIFESEDKGDKYNK---GYQN-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMEGLEPLNAIRVTQEAVWYYS------DNAPISNP------DESFK--RESESNLV 212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KKYKVIASMGHVRDLPRSQMGVDTEDNYEPKYITIRGKGPVVKELKK-----HAKKAKN 98
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King of Prussia
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19.8%;
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                                                ---FRANGQTIKFKGF------
                                                                                                                                                                                                                                                                                                                                       ---LLSGGLVPTKPPTPGDPPMPP
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                                                                                                               ----PAILD---TVSLDITQ
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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: prot
US-08-259-264-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08259264
Patent No. 5650293
                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (617) 227-59 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (617) 227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: pp60PIK: A DOWNSTREAM NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                     271 VPTKPPTPGDPPMPPNQPQT-TSVLIRKYAIGDYSKLLEGATLQLTGDNVNSFQARVFSS 329
416 NKNGSSQVVYCFNADLKSPPDSEDGGKTMTPDFTTGEVKYTHIAGRDLFKYTVKPRDTDP 475
                                    140 QYNPKLDVKLTYPVSRFQQDQLVKEDNIDAVGKNLQEFHSQYQEKS----KEYDRLY--E 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            596 -GEDCEVCGSP 605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543 VEFTVNMETLLDKIAEGDITWRKVIDGFFSSFKQDV--ERAEEEMEKIEIKDEPA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              435 --MTLYVETKDDSDSEKENKLPKLEQ----GD-----KVTATQIEPAQHYTQPPPRYTE 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Myers, Louis
REGISTRATION NUMBER: 35
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                30 LPPKPPKPMTPAVTNGMKDSFISLQDAEWYWGDISR-----EEVNDKLRDMPDGTFLV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/0
FILING DATE: 10-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                             ----KVEAGKVYTIIDGKQ---IENPNKEIVEPYSVEAYNDFEEFSVLTTQNYAKFYYAK 415
                                                                                                                  RDASTKMQ----GDYTLTLRKGGNNKLIKIYHRDGKYGFSEPLTFTSVVELINHYHHESLA 139
                                                                                                                                                         NDIGERIELSDGTYTLT------------------ 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HGESLTLQGLP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ARLVKTLEELKIGRPSTYAPTIDTIQKRNYVKLESKRFVPTELGEIVHEQVKEYFPEIID 542
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         454 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (617)
                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                               protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  227-5941
                                                                                                                                                                                                                                                                            3.1%; Score 123; DB 1; Length 454
19.4%; Pred. No. 0.054;
ative 78; Mismatches 162; Indels :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/259, 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35,965
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                                                                                                                                                                                                                                                                                162; Indels 142;
                                                                                                                                                                                                                                                                            Gaps
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656TINLKHGESLTLQGLPEGYSYLVKETDSEG-YKVKVNSQ-EVANATVSKT 703
304 -QHLVWLNHRGVRQRRLNAWLGIKNEDSD-ESYFINEEDENLPHYDEKT 350
TLRKTVTGL?
261 GEIHDSKLRLEQDLKKQALDNREIDKKMNSIKPDLIQLRKIRD 303
536 GDMNDSTLAVAKILVEYAQDSNPPQLTDLDFFIPNNNKYQSLIGTQWHPEDLVDIIRMED
224 HTQEQHSKDYIER-FRREGNEKEIERIMMNYDKLKSRL 260
476 DTFLKHIKKVIEKGYREKGQAIEYSGLTETQLRAATQLAIYYFTDSAELDKDKLKDYHGF
194 EYTRTSQEIEAFNETIKIFEEQC

Search completed: June 7, 2001, 00:17:32 Job time: 2866 sec